SUMMARY OF THE REGULAR MEETING OF THE
ARIZONA STATE RETIREMENT SYSTEM
INVESTMENT COMMITTEE

HELD ON
Tuesday, December 05, 2006
2:00 p.m., MST

The Investment Committee (IC) of the Arizona State Retirement System (ASRS) met at 3300 N. Central Avenue, 14th Floor Conference Room, Phoenix, Arizona 85012. Mr. Lawrence Trachtenberg, Chairperson of the IC, called the meeting to order at 2:03 p.m., MST.

The meeting was teleconferenced to the ASRS Tucson office, 7660 East Broadway Boulevard, Suite 108, Tucson, Arizona 85710.

1. Call to Order; Roll Call; Opening Remarks

Present: Mr. Lawrence Trachtenberg, Chairperson – via teleconference
Mr. Karl Polen – via teleconference
Mr. Christopher Harris – via teleconference

Absent: Ms. Anne Mariucci

A quorum was present for the purpose of conducting business.

2. Presentation, Discussion, and Appropriate Action Regarding U.S. Equity Small Cap Index Portfolio

Mr. Gary R. Dokes, ASRS Chief Investment Officer, introduced the topic, stating that the Board approved the new ASRS Asset Allocation Policy on October 20, 2006. Currently, the ASRS benchmarks its U.S. Equity small cap managers against the Russell 2000 Index. TimeSquare manages a SMID (Small/Mid Cap) Cap mandate benchmarked to the Russell 2500 Growth Index. Consistent with the new ASRS Asset Allocation Policy and effective January 1, 2007, the ASRS Small Cap Equity asset class will be benchmarked using the S&P 600 Index. The ASRS small cap managers' performance will be benchmarked against their respective S&P 600 core, value and growth indices. TimeSquare will maintain their Russell 2500 Growth Index benchmark.

Mr. Michael Viteri, Manager of Portfolio and Trading Strategies, detailed the expertise and experience of ASRS Passive Index Managers. Mellon Capital, Barclays Global Investors (BGI), State Street Global Advisors (SSGA), and the ASRS Investment Management Division (IMD) manage various equity index mandates for the ASRS. Some accounts are commingled, some are segregated. A synthetic replication utilizing futures (cash equitized using S&P 600 index futures) requires the underlying cash to be re-invested so that the yields equal the cost of carry (financing) of futures, which is typically LIBOR (London Interbank Offered Rate). A re-invested cash yield less than LIBOR will result in performance less than the index. Conversely, a re-invested cash yield greater than LIBOR will result in performance greater than the index return. Although there are futures available for the S&P 600, as of November 20, 2006, the open interest in S&P 600 futures totals to 16 contracts. This lack of liquidity makes a synthetic replication of the S&P 600 index using futures unfeasible. A synthetic replication utilizing swaps requires the ASRS to provide the counterparty with a LIBOR yield minus 2bps. If the cash management yield is less than LIBOR minus 2bps, then the overall return of the swap will result in a performance less than the S&P 600 return. Swaps introduce other aspects of risk not captured by volatility such as: Counter-party risk; re-pricing risk; maturity risk; duration risk; liquidity risk. Therefore, swaps are not very advantageous.

Portfolio objectives, strategies, and guidelines/constraints for the S&P 600 index fund mandate would be similar to the other internally managed index portfolios. The S&P 600 Index portfolio would have the following specific objective and underlying strategies:

<u>Objective</u>

- Alpha Target of 10 basis points annually.

<u>Strategies</u>

- Not fully participate in index add, delete and share changes , i.e., use of a mean reversion strategy resulting from excess trading volume leading up to Index change effective dates.
- Available guaranteed price improvement associated with add/delete Index changes.
- Opportunistic trading around Index change notification/effective dates.
- Take small tactical over/under-weights in specific names or industries/sectors relative to the Index.

Mr. Dokes emphasized the importance of looking at the performance history of the ASRS' internally managed portfolios, which has been good. From an operational and oversight perspective, the S&P 600 Index portfolio will be managed similarly to the E1-E5 portfolios. Performance will be monitored and reported by ASRS consultants and included in the Asset Class/Manager presentation to the Board. A variety of options are available for implementation of an S&P 600 index mandate. The two most viable alternatives follow.

Mellon Capital could manage the new S&P 600 Index mandate. Mellon is a good quality index provider, tracking error would be minimal, there would be no incremental cost from a fee structure perspective. However, there would be a limited opportunity to provide alpha (without inclusion of Securities Lending income).

The ASRS IMD could manage the new S&P 600 Index mandate. The ASRS IMD is a good quality index provider, ASRS would maximize the benefit from Securities Lending (8bps additional), there would be an Alpha target of Index + 10bps with index volatility, and there would be no incremental cost, which provides a savings from a fee perspective. Although this option is available, it would require minimal incremental time from existing staff.

Discussion ensued among the trustees and ASRS staff.

Motion: Mr. Christopher Harris moved that the IC recommend to the Board creation of an internally-managed S&P 600 Index passive portfolio (E6);

and

Funding the E6 portfolio with approximately $800 million originating from the Mellon Cap Small Cap Index portfolio and residual dollars associated with rebalancing of the ASRS Small Cap Equity to its new ASRS asset class allocation policy targets of 7%.

Mr. Karl Polen seconded the motion.

By a vote of 3 in favor, 0 opposed, 0 abstentions, and 1 absent, the motion was approved.

3. Presentation and Discussion Regarding Performance-Based Fees

Mr. Dokes introduced the topic, stating that a review and assessment of current practices regarding performance-based fees in various asset classes was identified as a 2006 major project initiative, presented to the IC at the February 8, 2006 meeting. The objective of the presentation was to provide insight and understanding of current practices and issues regarding the use of performance-based fees in various asset classes.

Mr. Terry Dennison, Mercer Investment Consulting, explained the concept of performance-based fees. They are generally offered for traditional asset classes/management techniques, but are effectively required ‘terms of trade’ for alternative investments. For traditional asset classes internal controls and SEC/compliance rules generally mean that every client gets approximately the same return. For alternative investments and portfolios, results are more customized and different clients can get substantially different returns. They provide the manager a share of the return above a target level in exchange for a lower floor fee. Managers typically propose a fee schedule with limited downside and significant upside. More complicated structures add caps, high-water marks, risk-based performance measures, and other features to the calculation of the sharing amount.

Mr. Dan Kapanak, Manager of Investment Analysis, noted that the most important advantage of performance-based fees is that they help to align the different interests of clients and managers, motivating managers to deliver strong performance and to avoid raising assets to the detriment of performance. They also connect fees to performance, thus avoiding years when fees and performance are out of balance. The biggest disadvantage of performance-based fees is that managers can increase the incentive fee value by adjusting the investment strategy and increasing risk. Given that incentive fees have an option-like character (especially in their payment for positive performance without a symmetrical penalty for negative performance), they become more valuable with increasing volatility of alpha.

Mr. Dennison addressed philosophical questions regarding performance-based fees. Will a manager actually 'work harder' and what does 'work harder' actually mean? Investment management is an intellectual activity and the manager has a fiduciary responsibility to perform as well as possible. All clients in a given product generally receive similar results. Performance fees will not make the manager smarter. The manager would not be any smarter or working harder. The client would actually get a modest discount for poor performance, and a significantly higher fee expense when the manager does well, the same performance that the client would get for a lower fixed fee.

Mr. Kapanak elaborated on the qualitative and quantitative considerations in selecting a fee structure.

Mr. Dennison spoke on the use of performance-based fees by other plan sponsors, noting that many review the concept. After the review, virtually all plan sponsors decide to remain with fixed fees, due to concerns including conceptual issues with the question of whether incentive fees actually change manager behavior in a manner positive to the plan, and due to increased risk as managers seek to maximize fee revenue. There is also the risk of potentially paying higher performance-based fees for the same results that others receive for lower fixed fees.

Mr. Kapanak presented the following conclusions:

- The use of performance-based vs. fixed fees is asset class specific. In the traditional asset classes, the common practice is to use fixed fees, while for the alternative asset classes, the practice is to use performance-based fees.
- In the traditional asset classes, the preference for performance-based vs. fixed fees is based on the ability to pick skillful managers. As that ability increases, the preference for fixed fees increases.
- Performance-based fees are typically viewed as an approach for aligning the economic interests of the client and investment manager. A better approach for aligning interests is side-by-side or co-investment by the manager. Their capital is at risk, rather than just their earnings stream.
- The ASRS should pursue active management in asset classes where there is a high probability that active management can add value. As such, the ASRS should have a preference for fixed fees in traditional asset classes. However, the ASRS will evaluate each fee structure as appropriate, but will not establish a specific policy.

4. Presentation and Discussion Regarding Future IC Agenda Topics

None.

5. Call to the Public

No members of the public requested to speak to the IC.

The meeting adjourned at 2:42 PM.

Respectfully submitted,

Lisa Hanneman, Secretary	Date	Gary Dokes, Chief Investment Officer	Date